Amendments to the Claims

Amendments are shown with <u>additions</u> and <u>deletions</u> or [[deletions]] as useful for clarity. This listing will replace are prior versions and listings of the claims in the application.

We Claim:

Claim 1. (Withdrawn) A method of controlling ectoparasites on a mammal comprising administering to said mammal a compound of formula I

wherein

R₁ is hydrogen, halogen, cyano, OH, SH, NO₂, COOH, COOR₂, CONH₂, CONR₂R₃, SO₃H, SO₂NR₂R₃, C₁-C₆-alkyl, halo-C₁-C₆-alkyl C₁-C₆-alkoxy, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C2-C6-alkenyl, C2-C6-alkinyl, C3-C6-cycloalkyl, halo-C3-C6-cycloalkyl, C3-C6-cycloalkyl, C3-C6-cycloal cycloalkylthio, C2-C6-alkenyloxy, halo-C2-C6-alkenyloxy, C1-C6-alkylthio, halo-C1-C6-alkylthio, C1-Ca-alkysulfonyloxy, halo-C1-Ca-alkylsulfonyloxy, C1-Ca-alkylsulfinyl, halo-C1-Ca-alkylsulfinyl, C1-Ce-alkylsulfonyl, halo-C1-Ce-alkylsulfonyl, C2-Ce-alkenylthio, halo-C2-Ce-alkenylthio, C2-Cealkenylsulfinyl, halo-C₂-C₆-alkenylsulfinyl, C₂-C₆-alkenylsulfonyl, halo-C₂-C₆-alkenylsulfonyl, NR₂R₃, unsubstituted or one- to five-fold substituted aryl or unsubstituted or substituted hetaryl. the substituents selected from the group consisting of halogen, evano, OH, SH, NO₂, COOH, COOR2, CONH2, CONR2R3, SO3H,SO3NR2R3, C1-C6-alkyl, halo-C1-C6-alkyl, C1-C6-alkyl, halo-C1-C6-alkyl, C1-C6-alkyl, halo-C1-C6-alkyl, C1-C6-alkyl, halo-C1-C6-alkyl, C1-C6-alkyl, halo-C1-C6-alkyl, C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₂-C₆-alkenyl, C₂-C₆-alkinyl, C₃-C₆-cycloalkyl, halo-C₃-C₆-alkenyl cycloalkyl, C₃-C₆-cycloalkyloxy, C₃-C₆-cycloalkylthio, C₂-C₆-alkenyloxy, halo-C₂-C₆-alkenyloxy, C₁-C₆-alkylthio, halo-C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyloxy, halo-C₁-C₆-alkylsulfonyloxy, C₁-C₆-alkylsulfonyloxy, C₁-C₆-alkylsulfonyloxy, halo-C₁-C₆-alkylsulfonyloxy, C₁-C₆-alkylsulfonyloxy, halo-C₁-C₆-alkylsulfonyloxy, halo-C alkylsulfinyl, halo-C₁-C₆-alkylsulfinyl, C₁-C₆-alkylsulfonyl, halo-C₁-C₆-alkylsulfonyl, C₂-C₆alkenylthio, halo-C₂-C₆-alkenylthio, C₂-C₆-alkenylsulfinyl, halo-C₂-C₆-alkenylsulfinyl, C₂-C₆-alkenylsulfinyl, C₂-C₆-alkenylsulfinyl, halo-C₂-C₆-alkenylsulfinyl, halo alkenylsulfonyl, halo-C2-C6-alkenylsulfonyl and NR2R3;

R₂ and R₃, independently of one another, signify hydrogen, C₁-C₆-alkyl, halo-C₁-C₆-alkyl, formyl, C₁-C₆-alkylcarbonyl, halo-C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl, halo-C₁-C₆-alkoxycarbonyl, C1-C6-alkylaminocarbonyl, di-C1-C6-alkylaminocarbonyl or unsubstituted or one-to five-fold substituted benzyl, the substituents selected from the group consisting of halogen cyano, OH, SH NO2, COOH, COOR2, CONH2, CONR2R3, SO3H, SO2NR2R3, C1-C6-alkyl, halo-C1-C6-alkyl, C1-C6-alkoxy, halo-C1-C6-alkoxy, C2-C6-alkenyl, halo-C2-C6-alkenyl, C2-C6-alkinyl, C3-C6cycloalkyl, halo-C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyloxy, C₃-C₆-cycloalkylthio, C₂-C₆-alkenyloxy, halo-C₂-C₆-alkylsulfonyloxy, C₁-C₆-alkylthio, halo-C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyloxy, halo-C₁-C₆-alkylthio alkylsulfonyloxy, C₁-C₆-alkylsulfinyl, halo-C₁-C₆-alkylsulfinyl, C₁-C₆-alkylsulfonyl, halo-C₁-C₆alkylsulfonyl, C2-C6-Alkenylthio, halo-C2-C6-alkenylthio, C2-C6-alkenylsulfinyl, halo-C2-C6alkenvisulfinyl, C2-C6-alkenvisulfonyl and halo-C2-C6-alkenvisulfonyl; R₄, R₅, R₆, R₇, R₈, R₉, R₁₀, R₁₁, R₁₂ and R₁₃, independently of one another, are hydrogen, halogen, cyano, nitro, OH, SH, NO₂, COOH, COOR₂, CONH₂, CONR₂R₃, SO₃H, SO₂NR₂R₃, C₁-C₆-alkyl, halo-C₁-C₆-alkyl, C₁-C₆-alkoxy, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₂-C₆-alkenyl, C2-C6-alkinyl, C3-C6-cycloalkyl, C2-C6-alkenyloxy, halo-C2-C6-alkenyloxy, C1-C6-alkylthio, halo-C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyloxy, halo-C₁-C₆-alkylsulfonyloxy, C₁-C₆-alkylsulfinyl, halo-C₁-C₆-alkylsulfinyl, C₁-C₆-alkylsulfonyl, halo-C₁-C₆-alkylsulfonyl, C₂-C₆-alkenylthio, halo-C₂-C₆alkenylthio, C2.C6-alkenylsulfinyl, halo-C2-C6-alkenylsulfinyl, C2-C6-alkenylsulfonyl, halo-C2-C6alkenylsulfonyl, C₁-C₆-alkylamino, di-C₁-C₆-alkylamino, C₁-C₆-alkylsulfonylamino, halo-C₁-C₆alkylsulfonylamino, C₁-C₆-alkylcarbonyl, halo-C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl, C₁-C₆alkylaminocarbonyl, di-C₁-C₆-alkylaminocarbonyl, or unsubstituted or one-to five-fold substituted aryl or unsubstituted or substituted hetaryl, the substituents selected from the group consisting of halogen, cyano, OH, SH, NO2, COOH, COOR2, CONH2, CONR2R3, SO3H, SO2NR2R3, C1-C6alkyl, halo- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, halo- C_1 - C_6 -alkoxy, C_2 - C_6 -alkenyl, halo- C_2 - C_6 -alkenyl, C_2 - $C_6\text{-alkinyl},\ C_3\text{-}C_6\text{-cycloalkyl},\ halo-C_3\text{-}C_6\text{-cycloalkyl},\ C_3\text{-}C_6\text{-cycloalkyloxy},\ C_3\text{-}C_6\text{-cycloalkylthio},\ C_2\text{-}C_6\text{-cycloalkyloxy},\ C_3\text{-}C_6\text{-cycloalkyloxy},\ C_3\text{-}C_6\text{-}C_7\text{-}C_8\text{-cycloalkyloxy},\ C_3\text{-}C_8\text{-$ C₆-alkenyloxy, halo-C₂-C₆-alkenyloxy, C₁-C₆-alkylthio, halo-C₁-C₆-alkylthio, C₁-C₆-alkylthio, C₁-C₆-alkylthio, C₁-C₆-alkylthio, halo-C₁-C₆-alkylthio, C₁-C₆-alkylthio, halo-C₁-C₆-alkylthio, alkylsulfonyloxy, halo-C₁-C₆-alkylsulfonyloxy, C₁-C₆-alkylsulfinyl, halo-C₁-C₆-alkylsulfinyl, C₁-C₆-alkylsulfinyl, C₁-C₆-alkyl alkylsulfonyl, halo-C1-C6-alkylsulfonyl, C2-C6-alkenylthio, halo-C2-C6-alkenylthio, C2-C6alkenylsulfinyl, halo-C2-C6-alkenylsulfinyl, C2-C6-alkenylsulfonyl, halo-C2-C6-alkenylsulfonyl and NR₂R₂:

X₁ and X₂, independently of one another, are C(R₁₄)(R₁₅), NR₁₄, O, S, SO or SO₂; and

 R_{14} and R_{15} , independently of one another, signify hydrogen, C_1 - C_6 -alkyl, formyl, C_1 - C_6 -alkylcarbonyl or halo- C_1 - C_6 -alkylcarbonyl.

Claim 2. (Withdrawn) The method of claim 1, wherein

 $R_1 \text{ is hydrogen, halogen, NO}_2, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy, \\ C_3-C_6-cycloalkyl, halo-C_3-C_6-cycloalkyl, C_3-C_6-cycloalkyloxy, C_3-C_6-cycloalkylthio, C_1-C_6-alkylthio or halo-C_1-C_6-alkylthio. \\$

Claim 3. (Withdrawn) The method of claim 1, wherein R_1 is hydrogen, halogen, NO_2 , C_1 - C_6 -alkyl, halo- C_1 - C_6 -alkyl, C_1 - C_6 -alkyvy or halo- C_1 - C_6 alkoxy.

Claim 4. (Withdrawn) The method of claim 1, wherein R_1 is hydrogen, C_1 - C_6 -alkyl or C_1 - C_6 -alkoxy.

Claim 5. (Withdrawn) The method of claim 1, wherein

 R_2 and R_3 , independently of one another, signify hydrogen, C_1 - C_6 -alkyl, formyl, C_1 - C_6 -alkylaminocarbonyl, C_1 - C_6 -alkylaminocarbonyl, di- C_1 - C_6 -alkylaminocarbonyl or unsubstituted or one- to five-fold substituted benzyl, the substituents selected from the group consisting of halogen, cyano, OH, SH, NO₂, COOH, COOR₂, CONH₂, CONR₂R₃, SO₃H, SO₂NR₂R₃, C₁- C_6 -alkyl, halo- C_1 - C_6 -alkyl, C₂- C_6 -alkenyl, C₃- C_6 -cycloalkyl, halo- C_3 - C_6 -cycloalkyl, C_3 - C_6 -cycloalkyl, C₃- C_6 -alkylthio, halo- C_1 - C_6 -alkylthio, C₁- C_6 -alkylulfonyloxy, halo- C_1 - C_6 -alkylulfonyloxy, C₃- C_6 -cycloalkylulfonyl, halo- C_1 - C_6 -alkylulfonyl, halo- C_1 - C_6 -alkylulfonyl, halo- C_1 - C_6 -alkylulfonyl, C₂- C_6 -alkenylthio, halo- C_2 - C_6 -alkenylthio, C_2 - C_6 -alkenylthio, C₂- C_6 -alkenylthio, C₃- C_6 -alkenylthio, C₃- C_6 -alkenylthio, C₃- C_6 -alkenylthio, C₄- C_6 -alkenylthio, C₅- C_6 -alkenylthio, C₇- C_6 -alkenylthio, C₇-

Claim 6. (Withdrawn) The method of claim 1, wherein R_2 and R_3 , independently of one another, signify hydrogen, C_1 - C_4 -alkyl, formyl, C_1 - C_4 -alkylcarbonyl or benzyl.

Claim 7. (Withdrawn) The method of claim 1, wherein R_2 and R_3 independently of one another, signify hydrogen, C_1 - C_2 -alkyl, benzyl or formyl.

Claim 8. (Withdrawn) The method of claim 1, wherein

 $R_{4},\,R_{5},\,R_{6},\,R_{7},\,R_{8},\,R_{9},\,R_{10},\,R_{11},\,R_{12}\,\text{and}\,\,R_{13},\,\text{independently of one another, are hydrogen, halogen, cyano, nitro,\,C_{1}-C_{6}-alkyl,\,halo-C_{1}-C_{6}-alkyl,\,C_{1}-C_{6}-alkoxy,\,halo-C_{1}-C_{6}-alkylthio,\,halo-C_{1}-C_{6}-alkylthio or unsubstituted or one- to five-fold substituted aryl or unsubstituted or substituted hetaryl, the substitutents selected from the group consisting of halogen, cyano, OH, SH, NO_{2}, COOH, COOR_{2}, CONH_{2}, CONR_{2}R_{3},\,SO_{3}H,\,SO_{2}NR_{2}R_{3},\,C_{1}-C_{6}-alkyl,\,halo-C_{1}-C_{6}-alkoy,\,halo-C_{2}-C_{6}-alkoy,\,halo-C_{2}-C_{6}-alkoy,\,halo-C_{3}-C_{6}-cycloalkyl,\,C_{3}-C_{6}-cycloalkyl,\,halo-C_{2}-C_{6}-alkyl,\,halo-C_{1}-C_{6}-alkylthio,\,C_{2}-C_{6}-alkylthio,\,halo-C_{1}-C_{6}-alkylthio,\,C_{2}-C_{6}-alkylthio,\,halo-C_{1}-C_{6}-alkylthio,\,C_{2}-C_{6}-alkylthio,\,halo-C_{1}-C_{6}-alkylthio,\,C_{2}-C_{6}-alkylthio,\,halo-C_{1}-C_{6}-alkylthio,\,C_{2}-C_{6}-alkylthio,\,halo-C_{1}-C_{6}-alkylthio,\,C_{2}-C_{6}-alkylthio,\,halo-C_{1}-C_$

Claim 9. (Withdrawn) The method of claim 1, wherein R_4 , R_6 , R_6 , R_7 , R_8 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} , independently of one another, are hydrogen, halogen, nitro, C_1 - C_4 -alkyl, halo- C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy or halo- C_1 - C_4 -alkoxy.

Claim 10. (Withdrawn) The method of claim 1, wherein R_4 , R_5 , R_6 , R_7 , R_8 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} , independently of one another, are hydrogen, halogen, nitro, C_1 - C_2 -alkyl or halo- C_1 - C_2 -alkyl.

Claim 11. (Withdrawn) The method of claim 1, wherein R_4 , R_5 , R_6 , R_7 , R_6 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} , independently of one another, are hydrogen, halogen, nitro or CFs.

Claim 12. (Withdrawn) The method of claim 1, wherein X_1 and X_2 , independently of one another, are NR₁₄, O or S.

Claim 13. (Withdrawn) The method of claim 1, wherein X_1 and X_2 , independently of one another, are NH, O or S.

Claim 14. (Withdrawn) The method of claim 1, wherein X_1 and X_2 are O.

Claim 15. (Withdrawn) The method of claim 1, wherein R_{14} and R_{15} , independently of one another, signify hydrogen, C_1 - C_4 -alkyl, formyl, C_1 - C_4 -alkylcarbonyl.

Claim 16. (Withdrawn) The method of claim 1, wherein R₁₄ and R₁₅, independently of one another, signify hydrogen or C₁-C₄-alkyl.

Claim 17. (Withdrawn) The method of claim 1, wherein $R_{\rm 14}$ and $R_{\rm 15}$ signify hydrogen.

Claim 18. (Withdrawn) The method of claim 1, wherein

 R_1 is hydrogen, halogen, NO₂, C₁-C₆-alkyl, halo-C₁-C₆-alkyl, C₁-C₆-alkoxy, halo-C₁-C₆-alkyl, halo-C₃-C₆-cycloalkyl, halo-C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyl, halo-C₃-C₆-cycloalkyl, C₃-C₆-cycloalkylthio, C₁-C₆-alkylthio or halo-C₁-C₆-alkylthio;

 $R_2 \ \text{and} \ R_3, \ \text{independently of one another, signify hydrogen,} \ C_1 - C_6 - \text{alkyl, formyl,} \ C_1 - C_6 - \text{alkylcarbonyl,} \ C_1 - C_6 - \text{alkylcarbonyl,} \ C_1 - C_6 - \text{alkylcarbonyl,} \ di - C_1 - C_6 - \text{alkylaminocarbonyl} \ or benzyl;$

 $R_4,\ R_5,\ R_6,\ R_7,\ R_6,\ R_9,\ R_{10},\ R_{11},\ R_{12}\ and\ R_{13},\ independently\ of\ one\ another,\ are\ hydrogen,\ halogen,\ cyano,\ nitro,\ C_1-C_6-alkyl,\ halo-C_1-C_6-alkyl,\ C_1-C_6-alkyny,\ halo-C_1-C_6-alkyny,\ halo-C_1-C_6-alkyny,\ C_3-C_6-cycloalkyl,\ C_1-C_6-alkylthio,\ halo-C_1-C_6-alkylthio\ or\ unsubstituted\ or\ one-\ to\ five-fold\ substituted\ aryl,\ re\ unsubstituted\ or\ substituted\ hetaryl,\ the\ substitutent\ selected\ from\ the\ group\ consisting\ of\ halogen,\ cyano,\ OH,\ SH,\ NO_2,\ COOH_2,\ CONH_2,\ CONH_2,\ CONR_2R_3,\ SO_3H,\ SO_2NR_2R_3,\ C_1-C_6-alkyl,\ halo-C_1-C_6-alkyl,\ C_1-C_6-alkyl,\ C_2-C_6-alkenyl,\ halo-C_2-C_6-alkenyl,\ C_2-C_6-alkylsulfinyl,\ halo-C_2-C_6-alkylsulfinyl,\ C_1-C_6-alkylsulfinyl,\ C_1-C_6-alkylsulfinyl,\ C_1-C_6-alkylsulfinyl,\ C_1-C_6-alkylsulfinyl,\ halo-C_1-C_6-alkylsulfinyl,\ C_2-C_6-alkylsulfinyl,\ halo-C_1-C_6-alkylsulfinyl,\ C_2-C_6-alkylsulfonyl,\ halo-C_1-C_6-alkylsulfonyl,\ C_2-C_6-alkylsulfonyl,\ C_$

alkenylsulfinyl, halo- C_2 - C_6 -alkenylsulfinyl, C_2 - C_6 -alkenylsulfonyl, halo- C_2 - C_6 -alkenylsulfonyl and NR₂R₃:

X₁ and X₂, independently of one another, are NR₁₄, O or S; and

R₁₄ signifies hydrogen, C₁-C₄-alkyl, formyl, C₁-C₄-alkylcarbonyl.

Claim 19. (Withdrawn) The method of claim 1, wherein

 R_1 is hydrogen, halogen, NO₂, C_1 - C_0 -alkyl, halo- C_1 - C_0 -alkyl, C_1 - C_0 -alkoxy or halo- C_1 - C_0 -alkoxy; R_2 and R_3 , independently of one another, signify hydrogen, C_1 - C_0 -alkyl, formyl, C_1 - C_0 -alkylcarbonyl or benzyl;

 R_4 , R_5 , R_6 , R_7 , R_6 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} , independently of one another, are hydrogen, halogen, nitro, C_1 - C_4 -alkyl, halo- C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy or halo- C_1 - C_4 -alkoxy; and X_1 and X_2 , independently of one another, are NH, O or S.

Claim 20. (Withdrawn) The method of claim 1, wherein

R₁ is hydrogen, C₁-C₆-alkyl or C₁-C₆-alkoxy:

 R_2 and R_3 , independently of one another, signify hydrogen, C_1 - C_2 -alkyl, formyl or benzyl; R_4 , R_5 , R_6 , R_7 , R_8 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} , independently of one another, are hydrogen, halogen, nitro, C_1 - C_2 -alkyl or halo- C_1 - C_2 -alky; and X_1 and X_2 are O.

Claim 21. (Withdrawn) The method of claim 1, wherein

R₁ is hydrogen, C₁-C₆-alkyl or C₁-C₆-alkoxy;

 R_2 and R_3 , independently of one another, signify hydrogen, C_1 - C_2 -alkyl, formyl or benzyl; R_4 , R_6 , R_6 , R_6 , R_7 , R_8 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} independently of one another, are hydrogen, halogen, nitro or CF_3 : and

 X_1 and X_2 are O.

Claim 22. (Currently amended) An ectoparasiticidal composition <u>for administration to a non-human animal</u> comprising a compound of formula I

wherein

R₁ is hydrogen, halogen, cyano, OH, SH, No₂, COOH, COOR₂, CONH₂, CONR₂R₃, SO₃H, SO₂NR₂R₃, C₁-C₆-alkyl, halo-C₁-C₆-alkyl, C₁-C₆-alkoxy; halo- C₁-C₆-alkoxy, C₂C₆-alkenyl, halo-C₂-C₆-alkenyl, C₂-C₆-alkinyl, C₃-C₆-cycloalkyl, halo-C₃-C₆cycloalkyl, C₃-C₆-cycloalkyloxy, halo-C₃-C₆-cycloalkyloxy, C₃C₆-cycloalkylthio, C₂-C₆-alkenyloxy, halo-C₂-C₆-alkenyloxy, C₁-C₆alkylthio, halo-C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyloxy, halo-C₁C₆-alkylsulfonyloxy, C₁-C₆alkylsulfinyl, halo-C₁-C₆-alkylsulfinyl, C₁-C₆-alkylsulfonyl, halo-C₁-C₆-alkylsulfonyl, C₂-C₆alkenvithio, halo-C2-C6-alkenvithio, C2-C6-alkenvisulfinyl, halo-C2-C6-alkenvisulfinyl, C2-C6alkenvlsulfonvl, halo-C₂-C₈-alkenvlsulfonvl, NR₂R₃, unsubstituted or one- to five-fold substituted aryl or unsubstituted or substituted hetaryl, the substituents selected from the group consisting of halogen, cyano, OH, SH, NO2, COOH, COOR2, CONH2, CONR2R3, SO3H, SO2NR2R3, C1-C6alkyl, halo-C₁-C₆-alkyl, C₁-C₆-alkoxyl, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₂-C₆-alkenyl, C₂-C6-alkinyl, C3-C6,-cycloalkyl, halo-C3-C6-cycloalkyl, C3-C6-cycloalkyloxy, C3-C6-cycloalkylthio, C2-C6.alkenyloxy, halo-C2-C6-alkenyloxy C1-C6alkylthio, halo- C1-C6-alkylthio, C1-C6alkylsulfonyloxy, halo-C₁-C₆-alkylsulfonyloxy, C₁-C₆-alkylsulfinyl, halo-C₁-C₆-alkylsulfinyl, C₁-C₆-alkylsulfinyl, C₁-C₆-alkyl alkylsulfonyl, halo-C₁-C₆-alkylsulfonyl, C₂-C₆-alkenylthio, halo-C₂-C₆-alkenylthio, C₂-C₆alkenylsulfinyl, halo-C2-C6-alkenylsulfinyl, C2-C6-alkenylsulfonyl, halo-C2-C6-alkenylsulfonyl and NR₂R₃;

 R_2 and R_3 , independently of one another, signify hydrogen, C_1 - C_6 -alkyl, halo- C_1 - C_6 -alkyl, formyl, C_1 - C_6 -alkylcarbonyl, halo- C_1 - C_6 -alkylcarbonyl, C_1 - C_6 -alkylaminocarbonyl, di- C_1 - C_6 -alkylaminocarbonyl or unsubstituted or one-to five-fold substituted benzyl, the substituents selected from the group consisting of halogen, cyano, OH, SH, NO₂, COOH, COOR₂, CONH₂, CONR₂R₃, SO₃H, SO₂NR₂R₃, C_1 - C_6 -alkyl, halo- C_1 - C_6 -alkoxy, halo- C_1 - C_6 -alkoxy, C_2 - C_6 -alkenyl, halo- C_2 - C_6 -alkoxy, halo- C_3 - C_6 -cycloalkyl, halo- C_3 - C_6 -cycloalkyl, halo- C_3 - C_6 -cycloalkyl, halo- C_3 - C_6 -alkylthio, halo- C_3 - C_6 -alkylthio, halo- C_3 - C_6 -alkylthio, halo- C_3 - C_6 -alkylsulfonyloxy, halo- C_3 - C_6 -alkylsulfonyloxy, halo- C_1 - C_6 -alkylsulfonyloxy, C_1 - C_6 -alkylsulfonyloxy, halo- C_1 - C_6 -alkylsulfonyloxy, C_1 - C_6 -alkylsulfonyloxy, halo- C_1 - C_6 -alkylsulfony

alkylsulfonyl, C_2 - C_6 -alkenylthio, halo- C_2 - C_6 -alkenylthio, C_2 - C_6 -alkenylsulfinyl, halo- C_2 - C_6 -alkenylsulfinyl, C_2 - C_6 -alkenylsulfonyl and halo- C_2 - C_6 -alkenylsulfonyl;

R₄, R₅, R₆, R₇, R₈, R₉, R₁₀ R₁₁, R₁₂ and R₁₃, independently of one another, are hydrogen, halogen, cyano, nitro, OH, SH, NO₂, COOH, COOR₂, CONH₂, CONR₂R₃, SO₃H, SO₂NR₂R₃, C₁-C₆-alkyl, halo-C₁-C₆-alkyl, C₁-C₆-alkoxy, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₂-C₆-alkenyl, C₂-C₆-alkenyl, halo-C₂-C₆-alkenyl, halo-C₂-C₆ C₆-alkinyl, C₃-C₆-cycloalkyl, C₂-C₆-alkenyloxy, halo-c₂-C₆-alkenyloxy, C₁-C₆-alkylthio, halo-C₁-C₆alkylthio, C₁-C₆-alkylsulfonyloxy, halo-C₁-C₆-alkylsulfonyloxy, C₁-C₆-alkylsulfinyl, halo-C₁-C₆alkylsulfinyl, C₁-C₆-alkylsulfonyl, halo-C₁-C₆-alkylsulfonyl, C₂-C₆-alkenylthio, halo-C₂-C₆alkenvithio, C₂-C₆-alkenvisulfinyl, halo-C₂-C₆-alkenvisulfinyl, C₂-C₆-alkenvisulfonyl, halo-C₂-C₆-alkenvisulfonyl, halo-C₂-C₆-alkenvisulfinyl, halo-C₂-C₆-alkenvisulfi alkenvisulfonyl, C1-Ca-alkylamino, di-C1-Ca-alkylamino, C1-Ca-alkylsulfonylamino, halo-C1-Caalkylsulfonylamino, C₁-C₆-alkylcarbonyl, halo-C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkylcarbonyl, C₁-C₆-alkylcarbo alkylaminocarbonyl, di-C₁-C₆-alkylaminocarbonyl, or unsubstituted or one- to five-fold substituted aryl or unsubstituted or substituted hetaryl, the substituents selected from the group consisting of halogen, cyano, OH, SH, NO₂, COOH, COOR₂, CONH₂, CONR₂R₃, SO₃H, SO₂NR₂R₃, C₁-C₆-alkyl, halo-C₁-C₆-alkyl, C₁-C₆-alkoxy, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₁-C₆-alkoxy, halo-C₁-C₆-alkoxy, C₂-C₆-alkenyl, halo-C₁-C₆-alkoxy, halo-C₁-alkoxy, halo-C₁ C2-C6-alkenyl, C2-C6-alkinyl, C3-C6-cycloalkyl, halo-C3-C6-cycloalkyl, C3-C6-cycloalkyl, C3-C6-cycloal cycloalkythio, C2-C6-alkenyloxy, halo-C2-C6-alkenyloxy, C1-C6-alkylthio, halo-C1-C6-alkylthio, C1-C6-alkylthio, C1-C6-alkylth C₆-alkylsulfonyloxy, halo-C₁-C₆-alkylsulfonyloxy, C₁-C₆-alkylsulfinyl, halo-C₁-C₆-alkylsulfinyl, C₁-C₆-alkylsulfonyl, halo-C₁-C₆-alkylsulfonyl, C₂-X₆-alkenylthio, halo-C₂-C₆-alkenylthio, C₂-C₆-alkenylthio, alkenylsulfinyl, halo-C2-C6-alkenylsulfinyl, C2-C6-alkenylsulfonyl, halo-C2-C6-alkenylsulfonyl and NR₂R₃:

 X_1 and X_2 , independently of one another, are $C(R_{14})(R_{15})$, NR_{14} , O, S, SO or SO_2 ; and R_{14} and R_{15} , independently of one another, signify hydrogen, C_1 - C_6 -alkyl, formyl, C_1 - C_6 -alkylcarbonyl or halo- C_1 - C_6 -alkylcarbonyl;

and at least one of a physiologically acceptable carrier or dispersant.

Claim 23. (Previously presented) The ectoparasitical composition according to claim 22 wherein said composition is in a pour-on or spot-on formulation.

Claim 24. (Previously withdrawn; Currently amended) A method of controlling ectoparasites comprising administering an effective amount of at least-one compound of formula | a composition according to claim [[1]] 22 to the habitat of the parasites.

Claims 25-26. (Cancelled)

Claim 27. (Currently amended) An ectoparasitical composition for administration to a nonhuman animal comprising a compound of formula I

$$R_{11}$$
 R_{12}
 R_{13}
 R_{14}
 R_{15}
 R

wherein R_1 is hydrogen, halogen, NO₂, C_1 - C_6 -alkyl, halo- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, C_3 - C_6 -cycloalkyl, halo- C_3 - C_6 -cycloalkyl, C_3 - C_6 -cycloalkyl, halo- C_3 - C_6 -cycloalkyl, C_3 - C_6 -cycloalkylthio. C_1 - C_6 -alkylthio:

 R_2 and R_3 , independently of one another, signify hydrogen, C_1 - X_6 -alkyl, formyl, C_1 - C_6 -alkylcarbonyl, C_1 - C_6 -alkoxycarbonyl, C_1 - C_6 -alkylaminocarbonyl, di- C_1 - C_6 -alkylaminocarbonyl or benzyl;

 $R_4,\ R_5,\ R_6,\ R_7,\ R_8,\ R_9,\ R_{10},\ R_{11},\ R_{12}\ and\ R_{13},\ independently\ of\ one\ another,\ are\ hydrogen,\ halogen,\ cyano,\ nitro,\ C_1-C_6-alkyl,\ halo-C_1-C_6-alkyl,\ C_1-C_6-alkoxy,\ halo-C_1-C_6-alkoxy,\ C_3-C_6-cycloalkyl,\ C_1-C_6-alkyl,\ halo-C_1-C_6-alkyl,\ halo-C_1-C_6-alkyl),\ halo-C_1-C_6-alkyl,\ halo-C_1-C_6-alkyl,\ halo-C_1-C_6-alkyl),\ halo-C_1-C_6-alkyl,\ halo-C_2-C_6-alkenyl,\ halo-C_2-C_6-alken$

 X_1 and X_2 , independently of one another, are NR₁₄, O or S; R_{14} signifies hydrogen, C_1 - C_4 -alkyl, formyl, C_1 - C_4 -alkylcarbonyl; and at lest one of a physiologically acceptable carrier or dispersant. Claim 28. (Previously presented) The composition of claim 27, wherein

 R_1 is hydrogen, halogen, NO₂, C_1 - C_6 -alkyl, halo- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy or halo- C_1 - C_6 -alkoxy; R_1 and R_3 , independently of one another, signify hydrogen, C_1 - C_4 -alkyl, formyl, C_1 - C_4 -alkylcarbonyl or benzyl:

 R_4 , R_5 , R_6 , R_7 , R_8 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} , independently of one another, are hydrogen halogen, nitro, C_1 - C_4 -alkyl, halo- C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy or halo- C_1 - C_4 -alkoxy; and X_1 and X_2 , independently of one another, are NH, O or S.

Claim 29. (Previously presented) The composition of claim 27, wherein R_1 is hydrogen, C_1 - C_8 -alkyl or C_1 - C_8 -alkoxy;

 R_2 and R_3 , independently of one another, signify hydrogen, C_1 - C_2 -alkyl, formyl or benzyl; R_4 , R_6 , R_6 , R_7 , R_6 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} , independently of one another, are hydrogen halogen, nitro, C_1 - C_2 -alkyl or halo- C_1 - C_2 -alkyl; and X_1 and X_2 are O.

Claim 30. (Previously presented) The composition of claim 27, wherein

 R_1 is hydrogen, C_1 - C_6 -alkyl or C_1 - C_6 -alkoxy;

 R_2 and R_3 , independently of one another, signify hydrogen, $C_1\text{-}C_2\text{-}alkyl$, formyl or benzyl; $R_4,\ R_5,\ R_6,\ R_7,\ R_6,\ R_9,\ R_{10},R_{11},\ R_{12} \ \text{and}\ R_{13}, \text{independently of one another, are hydrogen, halogen, nitro or CF_3; and}$

X₁ and X₂ are O.

Claim 31. (New) The composition of claim 27, wherein

R₁ is hydrogen, C₁-C₆-alkyl, or C₁-C₆-alkoxy;

each of R_2 and R_3 , independently of one another, signify hydrogen, C_1 - C_2 -alkyl, or formyl; each of R_4 , R_5 , R_6 , R_7 , R_6 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} , independently of one another, are hydrogen, fluorine, or CF_3 ; and

each of X1 and X2 are O.

Claim 32. (New) The composition of claim 31, wherein R2 and R3 each signify hydrogen.

Claim 33. (New) The composition of claim 32, wherein R₁ is hydrogen.

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Claim 34. (New) The composition of claim 27, wherein the compound is 4,6-bis-(4-fluoro-3-trifluoromethyl)phenoxy)-pyrimidin-5-ylamine.

Claim 35. (New) The composition of claim 27, wherein the endoparasites are ticks and the nonhuman mammal is a warm-blooded animal.

Claim 36. (New) The composition of claim 27, wherein the composition is formulated as a pouron or spot-on formulation, wherein said formulation is applied locally on a small area of the nonhuman animal but gives protection or treatment to almost any part of said non-human animal.